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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,623	05/26/2000	Kemi Y. Ibitayo	Sprint IDF 1415	7837

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EXAMINER

MAHMOUDI, HASSAN

ART UNIT

PAPER NUMBER

2175

DATE MAILED: 06/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/579,623	Applicant(s) IBITAYO ET AL.	
	Examiner Tony Mahmoudi	Art Unit 2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 May 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 and 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DOV POPOVICI
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DETAILED ACTION

Drawings

1. The drawings are objected to because of the following informalities:

Figure 5, as referred to in the disclosure (page 4, line 19) is not included in the drawings.

Correction is required.

Specification

2. The abstract of the disclosure is objected to because it includes improper

language such as “discloses” (in line 3.) See MPEP 608.01(b).

Correction is required.

3. The specification is objected to because of the following informalities:

On page 4, line 19, the disclosure refers to “Figure 5”. There are only 4 figures (1-4) submitted in the drawings.

Correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-5, 7-10, 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Gupta et al (U.S. Patent No. 5,913,061.)

As to claim 1, Gupta et al teaches a framework for isolating a business component from specific implementations of a datastore (see Abstract), comprising:

(a) a database wrapper (see column 19, lines 42-49, where “building object wrappers around the application data” is discussed) in communication with a business component (see column 19, lines 49-57, where “communication” is read on “interpretation of the generic framework through a bi-directional conversion mechanism”);

(b) a domain object factory in communication with the database wrapper (see column 5, lines 55-58, where “object factory” is read on “application connector”. Also see column 20, lines 15-24);

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(c) a domain object (see column 4, line 7, where “domain object” is read on “connectors 30”) in communication with the domain object factory (see column 4, lines 7-14, where “object factory” is read on “interchange server 20”); and

(d) a datastore in communication with the domain object (see column 6, lines 65-67, where “datastore” is read on “repository 238”).)

As to claim 2, Gupta et al teaches wherein the database wrapper further comprises a database wrapper interface in communication with the business component (see column 2, lines 1-5, where “data wrapper interface” is read on “application interface”) and a database wrapper implementation implementing the domain object factory (see column 2, lines 24-36.)

As to claim 3, Gupta et al teaches wherein the domain object factory further comprises a domain object interface (see column 4, lines 17-25) in communication with the database wrapper and a domain object factory implementation (see column 5, line 64 through column 6, line 9, where “object factory” is read on “application connector”. Also see column 20, lines 15-24) implementing the domain object.

As to claim 4, Gupta et al teaches wherein the domain object further comprises a domain object interface (see column 4, lines 17-25) in communication with the domain object factory (see column 6, lines 10-16) and a domain object implementation retrieving data from a datastore (see column 20, lines 53-61.)

As to claim 5, Gupta et al teaches wherein the domain object interface (see column 4, lines 17-25) further comprises a transient data converter (see column 24, lines 18-23) for converting the domain object from a persistent state to a transient state (see column 10, lines 12-24, and see column 20, lines 31-34.)

As to claims 7 and 12, Gupta et al teaches wherein the datastore is an object database (see column 4, lines 7-11, and see column 16, lines 30-37, and column 19, lines 42-44.)

As to claims 8 and 13, Gupta et al teaches wherein the datastore is accessed remotely (see column 5, lines 61-63, and column 23, lines 15-28.)

As to claim 9, Gupta et al teaches a method for isolating a business component from specific implementations of a datastore (see Abstract), comprising:

- (a) interfacing a database wrapper to a business component (see column 2, lines 1-5);
- (b) implementing the database wrapper (see column 19, lines 42-44);
- (c) interfacing a domain object factory to the database wrapper (see column 4, lines 17-25);
- (d) implementing the domain object factory (see column 5, line 64 through column 6, line 9, where “object factory” is read on “application connector”. Also see column 20, lines 15-24);
- (e) interfacing a domain object to the domain object factory (see column 4, lines 17-25);

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and

(f) implementing the domain object to retrieve data from a datastore (see column 20, lines 53-61.)

As to claim 10, Gupta et al teaches the method further comprising converting data retrieved from the datastore from a persistent state to a transient state (see column 24, lines 18-23, and see column 10, lines 12-24, and see column 20, lines 31-34.)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al (U.S. patent No. 5,913,061) in view of Carter (U.S. patent No. 5,878,419.)

As to claims 6 and 11, Gupta et al teaches wherein the datastore is a database (see column 4, lines 3-6.)

Gupta et al does not teach a relational database.

Carter teaches a method for creating a relational description of a formatted transaction, in which he teaches the datastore being a relational database (see column 1, lines 13-15, and see column 9, lines 1-8.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gupta et al to include a relational database.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gupta et al by the teaching of Carter, because being able to store data items in a relational database allows the content owner to define relationships between the data elements, where the relations can be added or deleted from the database schema without affecting the other relations between other data elements. These “relations” enable a database to efficiently deal with sets of records, as opposed to one record at a time, and to obtain a set of “related” records at a time.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al (U.S. patent No. 5,913,061) in view of McComb et al (U.S. patent No. 6,006,224.)

As to claim 14, Gupta et al teaches a method for isolating a business component from specific implementations of a datastore (see Abstract), comprising:

- (a) supplying a database wrapper (see column 19, lines 42-61);
- (c) using the database wrapper to obtain a domain object factory (see column 2, lines 24-36);
- (d) using the domain object factory to create a domain object (see column 4, lines 17-25, and see column 5, line 64 through column 6, line 9, where “object factory” is read on “application connector”. Also see column 20, lines 15-24);
- (e) converting the domain object from a persistent state to a transient state (see column 10, lines 12-24, and see column 20, lines 31-34.)

Gupta et al does not teach: (b) using the database wrapper to begin a database session; (f) ending the database session; and (g) returning the domain object to the business component.

McComb et al teaches a database system including a query mechanism for accessing data stored in a database, in which he teaches: using the database wrapper (see column 7, lines 51-59) to begin a database session (see column 8, lines 41-42, and see column 20, lines 51-53, where “begin session” is read on “connect”); ending the database session (see column 8, line 43, and see column 20, lines 54-55, where “end session” is read on “disconnect”); and returning the domain object to the business component (see column 9, lines 61-65.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gupta et al to include: using the database wrapper to begin a database session; ending the database session; and returning the domain object to the business component.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Gupta et al by the teachings of McComb et al, because using the database wrapper to begin a database session; ending the database session; and returning the domain object to the business component would enable users to define and run efficient queries on a datastore components.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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The following patents are cited to further show the state of art with respect to data retrieval, database wrappers, and database management in general

U.S. Patent No. 6,016,495 to McKeehan et al.


U.S. Patent No. 6,102,969 to Christianson et al.

2. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

tm

June 10, 2002


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